

## REMARKS

This amendment responds to the Office Action mailed March 5, 2002. The shortened statutory period for response is set to expire on June 5, 2002. Accordingly, Applicants respectfully submit that this response is being timely filed.

Claims 1-34 were pending. Claims 1-27 were allowed, and Claim 33 was indicated as containing allowable subject matter. Applicants note that the Office Action Summary on page 1 incorrectly summarizes Claims 1-27 as being rejected, where the detailed Office Action describes their reasons for allowance. By the above amendment, Claim 33 has been amended into independent form, and Claims 28, 31 and 32 have been canceled without prejudice or disclaimer. Accordingly, Claims 1-27, 29-30, and 33-34 are currently pending in the present application, and it is respectfully submitted that these claims are in proper condition for allowance based on the following remarks.

## FORMALITIES

The Office Action asserts that the written consent to the filing of the present Reissue application is not signed by a party authorized to act on behalf of the assignee. Applicants respectfully traverse this assertion. In accordance with 37 CFR 3.73(b)(2)(i), a person is authorized to act on behalf of the assignee if a statement is included that the person signing the submission is a person authorized to sign on behalf of the assignee. See MPEP § 1410.01. It is clearly indicated on the Consent of Assignee form that the person signing the consent, Hidemasa Kitagawa, is an Authorized Signing Officer designated for the assignee. Applicants respectfully submit that the Consent of Assignee has been signed by a party authorized to act on behalf of the assignee.

The Office Action asserts that the declaration is defective for not identifying at least one error pursuant to 37 CFR 1.175(a)(1). Applicants respectfully traverse this assertion. 37 CFR 1.175(a)(1) recites that the declaration must state that the applicant believes the original patent to be wholly or partly inoperative by reason of the patentee claiming less than the patentee had the right to claim in the patent, stating at least one error being relied upon by the patentee as the basis for the reissue. The Reissue Declaration specifically states that the patentee claimed less than he had a right to claim in the patent. The Reissue Declaration further identifies the at least

one error as the data conversion apparatus recited in Claims 1-27 being **unnecessarily limited to use as a data transmitting apparatus**. The broadening reissue removes this unnecessary limitation that the data conversion apparatus has to be used in a data transmitting apparatus. According to MPEP § 1414 (II), "In identifying the error, it is sufficient that the reissue oath/declaration identify a **single word, phrase, or expression** in the specification or in an original claim, and how it renders the original patent wholly or partly inoperative or invalid." Applicants respectfully submit that the declaration properly identifies at least one error in accordance with the provisions of MPEP § 1414.

Claim 33 was indicated as containing allowable subject matter, but it was objected to as being dependent upon a rejected base claim. By the above amendment, Claim 33 has been rewritten in independent form to include the limitations of its respective base claim and intervening claims. Applicants respectfully submit that Claim 33 is now in proper condition for allowance.

#### SUMMARY OF THE INVENTION

The present invention can be used in a one-way data communication system, such as a digital TV broadcasting system, wherein data can be transmitted from a data transmitting apparatus to a data reception apparatus. The present invention, for example, can supplement television broadcasting with an Internet capability so that a viewer using a television set can access the Internet and through the use of a remote controller that is standard with television sets can have an interactive operation he Internet displayed information. In this regard, Hyper Text Markup Language (HTML) documents that are available over the Internet and which are stores at sites or sources on the World Wide Web can be particularly formatted so that the remote controller can be simply used without requiring a keyboard or mouse to select "hot spots" on the display document.

Thus, the present invention is directed at implementing a user-friendly format of integrating the Internet into a television set so that the average viewer can not only view television programs using a remote controller in a conventional manner, but also can use the same remote controller, to not only select an Internet display, but further to review information that is desired to be viewed on the Internet. The ability to scroll information from the Internet that is available on PC computer monitors is not available on a conventional T.V. set, but the

present invention can uniquely link destination information from one page to another page, so that the user can access the information through his remote controller. The data conversion apparatus of the present invention provides a protocol and format for converting HTML documents and assigning a supplemental design to a design image element in the viewer's displayed image that can specify another document as a link destination. This procedure is independent of the user and is transparent to the user since the user only sees the combined image with the option of using his remote controller to select, on the viewing screen, a supplemental design and thereby specify another document as a link destination.

### PRIOR ART REJECTIONS

Claims 28-32 and 34 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,745,360 to *Leone et al.* This rejection is respectfully traversed, and reconsideration is requested based on the following remarks.

Applicants initially note that Claims 28 and 31-32 were canceled above without prejudice or disclaimer. With regard to Claim 29, the data conversion apparatus includes an identifier adding means for adding an identifier for cursor control to each display image element in the display image in accordance with the display position of each display image element. A display image element generating means generates the display image elements from character strings, at least one of which contains a piece of link destination information specifying another document as a link destination. The identifiers are added in accordance with the display positions of the display image elements.

As shown in FIGS. 31 and 32 of the subject application, cursor designs 3003 shown in FIG. 30 are displayed as display image elements. The display image elements have identifiers 1-9, respectively. Pieces of link destination information specifying other documents as link destinations are generated respectively in correspondence with the identifiers, as shown in FIG. 33.

With the construction recited in Claim 29, the data conversion apparatus allows a user to easily select a desired cursor design by pressing a numeral button on a remote control corresponding to the identifier of the desired cursor design, or by pressing the "up" or "down" buttons to scroll through the cursor designs. This provides an effect that identifiers can be used to obtain other documents which are specified as the link destinations.

In contrast, the *Leone* reference discloses a general technique for converting non-HTML documents to HTML documents and hypertext links. The Abstract of *Leone* only teaches that non-HTML softcopy documents can be converted to HTML formatted documents. In contrast, the present invention has an effect of obtaining a document written in HTML (e.g. from the WWW), converting the obtained document into a user-friendly display image, and providing to users the converted display image on a one-way communication means. The Office Action cites col. 11, lines 50-67 of *Leone* as teaching the identifier adding means of the present invention. However, the cited portion of *Leone* fails to provide any description which teaches or suggests the **addition of an identifier for cursor control**, as performed by the identifier adding means of the data conversion apparatus of current Claim 29. "Under 35 U.S.C. § 102, anticipation requires that each and every element of the claimed invention be disclosed in the prior art. . . . In addition, the prior art reference must be enabling, thus placing the allegedly disclosed matter in the possession of the public." *Akzo N.V. v. US. International Trade Commission*, 1 USPQ 2d 1241, 1245 (Fed. Cir. 1986), *cert. denied*, 482 U.S. 909 (1987). Applicants respectfully submit that the *Leone* reference fails to teach or suggest adding an identifier for cursor control to each display image element. Thus, Applicants respectfully submit that Claim 29 and its respective dependent Claim 30 are not anticipated by the *Leone* reference. Reconsideration is respectfully requested.

Claim 34 recites a data receiving apparatus having a "reception means for receiving an operation signal of a move button on a remote control" and a "focus control means for controlling the focus and allowing another display image element to be focused on in accordance with the received operation signal" from the remote control. It is asserted in the Office Action that the *Leone* reference teaches the claimed reception means and focus control means based on *Leone's* teaching of a keyboard to control the display. Applicants respectfully traverse this assertion, as the remote control of the present invention is not equivalent to the keyboard of *Leone*.

The present application states in the "SUMMARY OF THE INVENTION" that the present invention "enables interactive operations on home pages displayed on the TV screen by using a **remote controller of the TV set**," see col. 1, lines 35-37 of U.S. Patent No. 5,930,808. Furthermore, in the "Description of the Prior Art," the present application states that conventional interactive operation techniques have been created on the assumption that a

pointing device, such as a keyboard or mouse, which are peripheral devices of computers, is used to input instructions, **not a remote controller** of a TV set ,” see col. 1, lines 23-28 of the ‘808 patent. Due to the conventional assumption that a pointing device would be either a keyboard or a mouse, it made it quite difficult to use a TV remote controller to perform the interactive operations. Thus, it is an object of the present invention to move away from the prior art conventional systems which utilize keyboards as pointing devices and to enable a remote controller of a TV set to perform interactive operations.

The present invention can supplement television broadcasting with an Internet capability so that a viewer using a television set can access the Internet and through the use of a remote controller that is standard with television sets can have an interactive operation he Internet displayed information. In this regard, HTML documents that are available over the Internet and which are stores at sites or sources on the World Wide Web can be particularly formatted so that the remote controller can be simply used without requiring a keyboard or mouse to select “hot spots” on the display document.

As can be seen, the *Leone* reference discloses such a conventional use of a keyboard which the present invention is specifically designed to avoid. The present invention’s remote controller excludes keyboards from the means for achieving the purpose of the present invention. Applicants note that the receiving means of Claim 34 is written in means-plus-function language, where “... one construing means-plus-function language in a claim must look to the specification and interpret that language in light of the corresponding structure, material, or acts described therein, and equivalents thereof, to the extent that the specification provides such disclosure.” *In re Donaldson Co.*, 29 USPQ 2d 1845, 1848-50 (Fed. Cir. 1994) (en banc). The *Donaldson* opinion further stated:

Per our holding, the "broadest reasonable interpretation" that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination.

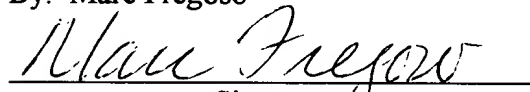
The structure disclosed in the specification of the present invention clearly is directed to a receiving means for receiving signals from a remote controller for a TV set, where the specification further explicitly describes that prior computer peripheral devices, such as

keyboards and mouses, are not equivalent to such a remote controller since the present invention is attempting to avoid their usage. The present invention is designed to simply allow a TV remote controller to be utilized and avoid such prior computer peripheral devices uses. Thus, the keyboard disclosed in the *Leone* reference clearly does not read on the receiving means of the data receiving apparatus of Claim 34. Applicants respectfully submit that the data receiving apparatus of Claim 34 is not anticipated by the *Leone* reference, and reconsideration is requested.

In each case, the pending rejections should be reconsidered in view of the amendments and remarks herein. Applicants believe that this case is in good condition for allowance, and a Notice of Allowance is earnestly solicited. If a telephone or further personal conference would be helpful, the Examiner is invited to call the undersigned, who will cooperate in any appropriate manner to advance prosecution.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231 on June 5, 2002.

By: Marc Fregoso

  
Signature

Date: June 5, 2002

Very truly yours,

PRICE AND GESS



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Bradley D. Blanche  
Reg. No. 38,387  
2100 S.E. Main St., Ste. 250  
Irvine, CA 92614  
949/261-8433

## VERSION TO SHOW CHANGES MADE

### IN THE CLAIMS:

Claims 28 and 31-32 were canceled without prejudice or disclaimer.

Claim 33 was amended as follows:

1           33.     (Amended) [The] A data conversion apparatus [of Claim 32 further] for use in a  
2 data communication system which achieves pseudo interactive communications by using one-  
3 way communications from the data transmitting apparatus to a plurality of data receiving  
4 apparatuses, the data conversion apparatus comprising:

5                 document storing means storing a plurality of documents each of which includes one or  
6 more character strings at least one of which contains a piece of link destination information  
7 specifying another document as a link destination;

8                 display image element generating means for reading the character strings one at a time  
9 from the document storing means and converting each read character string into a display image  
10 element being a bit-mapped graphic;

11                display image generating means for generating a display image which is composed of  
12 display image elements of a same category and is to be displayed on the plurality of data  
13 receiving apparatuses as one screen;

14                display link destination information converting means for converting each piece of link  
15 destination information into a piece of display link destination information which specifies, as a  
16 link destination, another display image which is a display image of the other document generated  
17 by the display image generating means,

18                wherein the document is written in HTML and the display image generating means  
19 determines categories of the display image elements from tags written in the document;

20 supplementary design storing means storing supplementary designs with serial numbers;  
21 and  
22 supplementary design adding means for reading the supplementary designs from the  
23 supplementary design storing means one by one in order, and adding each read supplementary  
24 design to each piece of link destination information specifying the other document as the link  
25 destination, on a one-to-one basis, wherein  
26 the display link destination information converting means converts each piece of link  
27 destination information into a piece of display link destination information corresponding to a  
28 serial number assigned to a supplementary design,  
29 the supplementary design storing means includes:  
30 a maximum number storing unit for storing a maximum number of the supplementary  
31 designs in the display image, wherein  
32 the display image generating means further includes:  
33 a maximum number judging unit for judging whether the number of the supplementary  
34 designs to be arranged in the display image exceeds the maximum number; and  
35 a display image dividing unit for, when the maximum number judging unit judges that  
36 the number of the supplementary designs exceeds the maximum number, sending an instruction  
37 to the display image generating means to divide the display image into the plurality of display  
38 sub-images so that supplementary designs less than the maximum number are added to each of  
39 the plurality of display sub-images divided from the display image, wherein the display image  
40 generating unit generates the plurality of display sub-images according to the instruction.